

## General

### Title

Pharmacotherapy management of chronic obstructive pulmonary disease (COPD) exacerbation: percentage of COPD exacerbations for members 40 years of age and older who had an acute inpatient discharge or ED encounter between January 1 to November 30 of the measurement year and who were dispensed a bronchodilator within 30 days of the event.

### Source(s)

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

## Measure Domain

### Primary Measure Domain

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of chronic obstructive pulmonary disease (COPD) exacerbations for members 40 years of age and older who had an acute inpatient discharge or emergency department (ED) encounter between January 1 to November 30 of the measurement year and who were dispensed a bronchodilator within 30 days of the event.

## Rationale

While other major causes of death have been decreasing, chronic obstructive pulmonary disease (COPD) mortality has risen, making it the fourth leading cause of death in the United States. COPD is characterized by airflow limitation that is not fully reversible, is usually progressive and is associated with an abnormal inflammatory response of the lung to noxious particles or gases. COPD defines a group of diseases that includes chronic bronchitis and emphysema, and patients are prone to frequent exacerbations of symptoms that range from chronic cough and sputum production to severe disabling shortness of breath, leading to significant impairment of quality of life.

In addition to being a major cause of chronic disability, COPD is a driver of significant health care service use. The disease results in both high direct and high indirect costs, and exacerbations of COPD account for the greatest burden on the health care system, though studies have shown that proper management of exacerbations may have the greatest potential to reduce the clinical, social and economic impact of the disease. Pharmacotherapy is an essential component of proper management.

## Primary Clinical Component

Pharmacotherapy management; chronic obstructive pulmonary disease (COPD) exacerbation; bronchodilator

## Denominator Description

Health plan members 40 years of age or older as of January 1 of the measurement year with a chronic obstructive pulmonary disease (COPD) exacerbation as indicated by an acute inpatient discharge or emergency department (ED) encounter with a principal diagnosis of COPD (see the related "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields)

Note: The eligible population for this measure is based on acute inpatient discharges and ED visits, not on members. It is possible for the denominator to include multiple events for the same individual.

## Numerator Description

Dispensed prescription for a bronchodilator (refer to Table PCE-D in the original measure documentation for a list of bronchodilators) on or 30 days after the Episode Date. The organization may count bronchodilators that are active on the Episode Date.

A prescription is considered active if the "days supply" indicates the date the member filled the prescription, which is the number of days or more between that date and the relevant date.

## Evidence Supporting the Measure

### Evidence Supporting the Criterion of Quality

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

# Evidence Supporting Need for the Measure

## Need for the Measure

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

Accreditation

Decision-making by businesses about health-plan purchasing

Decision-making by consumers about health plan/provider choice

External oversight/Medicaid

External oversight/Medicare

External oversight/State government program

Internal quality improvement

## Application of Measure in its Current Use

### Care Setting

Managed Care Plans

### Professionals Responsible for Health Care

Measure is not provider specific

### Lowest Level of Health Care Delivery Addressed

Single Health Care Delivery Organizations

### Target Population Age

Age greater than or equal to 40 years

### Target Population Gender

Either male or female

## Stratification by Vulnerable Populations

Unspecified

## Characteristics of the Primary Clinical Component

### Incidence/Prevalence

Unspecified

### Association with Vulnerable Populations

Unspecified

### Burden of Illness

See the "Rationale" field.

### Utilization

See the "Rationale" field.

### Costs

See the "Rationale" field.

## Institute of Medicine (IOM) Healthcare Quality Report Categories

### IOM Care Need

Getting Better

Living with Illness

### IOM Domain

Effectiveness

Timeliness

## Data Collection for the Measure

### Case Finding

Users of care only

## Description of Case Finding

Health plan members 40 years of age or older as of January 1 of the measurement year who were continuously enrolled from the Episode Date\* through 30 days after the Episode Date who had no gaps in enrollment with a chronic obstructive pulmonary disease (COPD) exacerbation as indicated by an acute inpatient discharge or emergency department (ED) encounter with a principal diagnosis of COPD

\**Episode Date*: The date of service for any acute inpatient discharge or ED claim/encounter during the Intake Period\*\* with a principal diagnosis of COPD.

For an *acute inpatient claim/encounter*, the Episode Date is the date of discharge.

For an *ED claim/encounter*, the Episode Date is the date of service.

\*\**Intake Period*: An 11-month period that begins on January 1 of the measurement year and ends on November 30 of the measurement year. The Intake Period captures eligible episodes of treatment.

## Denominator Sampling Frame

Patients associated with provider

## Denominator Inclusions/Exclusions

### Inclusions

Health plan members 40 years of age or older as of January 1 of the measurement year with a chronic obstructive pulmonary disease (COPD) exacerbation as indicated by an acute inpatient discharge or emergency department (ED) encounter with a principal diagnosis of COPD

Note: The eligible population for this measure is based on acute inpatient discharges and ED visits, not on members. It is possible for the denominator to include multiple events for the same individual.

Refer to the original measure documentation for steps to identify the eligible population.

### Exclusions

Do not include ED visits that result in an inpatient admission.

*Test for transfers*. Exclude Episode Dates on which the member was transferred directly to an acute or nonacute care facility for any diagnosis.

*Test for readmission and additional ED visits*. Exclude Episode Dates when the member was readmitted to an acute or nonacute care facility for any diagnosis within 14 days after the Episode Date. Exclude Episode Dates for which the member had an ED visit for any diagnosis within 14 days after the Episode Date.

## Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

## Denominator (Index) Event

Clinical Condition

Encounter

Institutionalization

Patient Characteristic

## Denominator Time Window

Time window brackets index event

## Numerator Inclusions/Exclusions

### Inclusions

Dispensed prescription for a bronchodilator (refer to Table PCE-D in the original measure documentation for a list of bronchodilators) on or 30 days after the Episode Date. The organization may count bronchodilators that are active on the Episode Date.

A prescription is considered active if the "days supply" indicates the date the member filled the prescription, which is the number of days or more between that date and the relevant date.

### Exclusions

Unspecified

## Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## Numerator Time Window

Fixed time period

## Data Source

Administrative data

## Level of Determination of Quality

Individual Case

## Pre-existing Instrument Used

Unspecified

## Computation of the Measure

## Scoring

Rate

## Interpretation of Score

Better quality is associated with a higher score

## Allowance for Patient Factors

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

## Description of Allowance for Patient Factors

This measure requires that results are reported separately for the commercial, Medicare, and Medicaid product lines.

## Standard of Comparison

External comparison at a point in time

External comparison of time trends

Internal time comparison

## Evaluation of Measure Properties

### Extent of Measure Testing

Unspecified

## Identifying Information

### Original Title

Pharmacotherapy management of COPD exacerbation (PCE).

### Measure Collection Name

HEDIS® 2011: Healthcare Effectiveness Data & Information Set

### Measure Set Name

Effectiveness of Care

### Measure Subset Name

Respiratory Conditions

### Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

### Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

## Funding Source(s)

Unspecified

## Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

## Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

## Endorser

National Quality Forum - None

## Adaptation

Measure was not adapted from another source.

## Release Date

2007 Jul

## Revision Date

2010 Jul

## Measure Status

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

## Source(s)

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications. Washington (DC): National Committee for Quality



## Measure Availability

The individual measure, "Pharmacotherapy Management of COPD Exacerbation (PCE)," is published in "HEDIS® 2011. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org) .

## Companion Documents

The following is available:

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Volume 2: technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. 10 p. This document is available in Portable Document Format (PDF) from the [National Committee for Quality Assurance \(NCQA\) Web site](#) .

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on November 15, 2007. The information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on March 10, 2009. The information was verified by the measure developer on May 29, 2009. This NQMC summary was updated again by ECRI Institute on January 15, 2010 and February 16, 2011.

## Copyright Statement

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For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to *HEDIS Volume 2: Technical Specifications*, available from the NCQA Web site at [www.ncqa.org](http://www.ncqa.org) .

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